

What is claimed is:

1. A method for fabricating a contact pad of a semiconductor device, the method comprising:
  - forming a plurality of conductive layer patterns displaced on a silicon
  - 5 substrate with adjoining to each other;
  - forming an insulating layer on a top of the conductive layer patterns;
  - depositing a material layer serving as a hard mask on the insulating layer;
  - forming a photoresist pattern between the conductive layer patterns on the hard mask material layer to form a contact hole;
  - 10 defining an area for forming a contact by forming by etching the hard mask material layer with utilizing the photoresist pattern as an etching mask;
  - removing the photoresist pattern;
  - exposing the silicon substrate by etching the insulating layer with utilizing the hard mask as an etching mask to thereby form an open portion;
  - 15 forming a polymer layer on the open portion;
  - exposing the silicon substrate by removing the hard mask and the polymer layer by implementing an etch back process; and
  - forming a contacted pad on the exposed silicon substrate.
- 20 2. The method of claim 1, wherein the conductive layer pattern includes any one of a gate electrode pattern, a bit line pattern or a metal wiring.
3. The method of claim 1, wherein, in the step of forming the photoresist pattern comprises using an argon fluoride (ArF) photoresist and an ArF light source.
- 25 4. The method of claim 1, wherein the hard mask material layer includes an insulating material layer selected from the group consisting of a SiC layer, an undoped poly silicon layer, a silicon nitride layer, and a silicon oxide nitride layer.
- 30 5. The method of claim 1, wherein the insulating material layer is formed at a thickness ranging of about 400 Å to about 2000 Å.

6. The method of claim 1, wherein the hard mask material layer includes a conductive material layer selected from the group consisting of a tungsten layer, a tungsten silicide layer or a doped poly silicon layer.

5 7. The method of claim 1, further comprising the step of forming a bottom arc layer with an organic material.

8. The method of claim 1, wherein the contact pad is a doped poly silicon layer.

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9. A semiconductor device made in accordance with the method of claim 1.

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10. A semiconductor device made in accordance with the method of claim 2.

11. A semiconductor device made in accordance with the method of claim 3.

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12. A semiconductor device made in accordance with the method of claim 4.

13. A semiconductor device made in accordance with the method of claim 5.

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14. A semiconductor device made in accordance with the method of claim 6.

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15. A semiconductor device made in accordance with the method of claim 7.

16. A semiconductor device made in accordance with the method of claim 8.